From: David Cohan [DCohan@neea.org]
Sent: Monday, February 25, 2013 11:31 AM

To: Bryden, Peggy (DES)

Cc: Nogler, Tim (DES); jeanette.mckague@warealtor.org; janh@biaw.com; Kim

Drury; Murray, Chuck (COM); Gary Nordeen; David Cohan; Duane Jonlin

Subject: RE: SBCC Exec. Committee Invite

Peggy,

Unfortunately, I will be out of the country Feb 26-Mar 12 so I will not be able to join this call. However, this is a topic I'm very interested in so I would like to offer the following comments with the hope that they can be introduced into the conversation where appropriate. My comments are based on my experience with the energy code, the only code process I have been involved with.

There are two critical areas where I believe Council action could create a smoother, more transparent code development process

- "Supporting Data for Statewide Amendment Proposals" which includes "Economic costs and benefits Use the Table in Part IV of this form to estimate the costs and benefits of the proposal on the construction industry, the user and/or public, the enforcement community, and operation and maintenance." The form specifically states that "incomplete proposals will not be accepted". Yet many, if not most, of the energy code proposals were accepted even though they did not include this economic information or the information provided was incomplete. Given the intense scrutiny that the Council undergoes to meet its requirement that new codes be cost-effective, this lack of information virtually guarantees a difficult-to-defend outcome.
- b. **SBCC Staff Resources and Expertise.** Current SBCC staff have neither the time nor the expertise to review proposals. While it is reasonable to rely on the TAG to debate proposals, when the proponent of a proposal claims the cost is \$X and an opponent claims it is ten times that, ultimately it rests on SBCC to decide which one will be used in the economic analysis. The Council could address this by adding staff or hiring a consultant. At this time, the Council relies completely on NEEA to conduct its economic analyses which leaves it open to criticisms about its credibility.
- c. Cost-Effectiveness Must be Defined. Cost-effectiveness can be defined in many different ways yet the Council has never taken on the task of coming up with its own official definition; without a definition there is no way to know what information needs to be collected or how it should be analyzed. The Department of Commerce presented a variety of concepts to the Council very early in the energy code development process the but the Council did not address the topic substantively until the day the code was approved in November, much too late to provide useful guidance for participants or itself. Below is a list of some concepts I developed for a different purpose but give a basic idea of what would need to be addressed. Note that formulating a detailed policy would require a substantial time commitment on the part of the Council.
- 1. Cost-effectiveness is only meaningful in the context of a specific economic perspective. It is always wrong to say, by itself, "This is cost-effective" or "This is not cost-effective". The meaningful version of these is "This is cost-effective for a builder" or "This is not cost-effective for

- a homeowner", etc. If everyone who speaks or supplies data is required to give a perspective it will avoid a lot of unnecessary arguing.
- 2. A corollary to #1 is that the Council has to decide in advance whose perspective(s) will be used to make decisions. We already know that what's good for a builder is not necessarily good for a home-buyer and vice-versa. I believe Washington statute statute references multiple perspectives but ultimately the Council has to decide which takes precedence. The obvious perspectives you will care about are developer, builder, homebuyer/homeowner, and society but there may be others (utility?).
- 3. There is no right and wrong in cost-effectiveness, it's just a tool. Everything is based on assumptions and one can reasonably come to any conclusion desired if the correct supporting assumptions are made. Therefore what's critical is to be completely transparent with all assumptions in terms of both what they are and what they are based on (i.e. cited data source, best guess, etc.). This has direct implications for what should be required from those submitting code change proposals.
- 4. There is nothing sacred about a cost-effectiveness equation. You can use an existing one, modify an existing one or make up something. What's important is that there is an equation that is acceptable to the Council and aids it in getting to desirable outcomes. It is critical that even math-phobic Council members understand whatever equation is decided on. (Note that I am using the word equation purposefully. If you don't agree on an objective mechanism that you can come always come back to in order to make a decision it means that anyone can say that something is or isn't cost-effective and nobody else has a basis to dispute it. Ideally, once you have decided on a process and an equation there are no arguments afterwards about the outputs.)
- 5. Inevitably there will be lots of important areas where there are no data, little data or conflicting data. The Council needs to discuss exactly how it will deal with these situations and publish them in a formal document for use by both itself and proposers.
- 6. The most consistently controversial element is costs. The most common source of discrepancy is a proponent's decision to use either (1) current costs or (2) future costs that reflect a mature market. The former is an extremely conservative assumption (i.e. that as more and more people use something the cost will NOT go down); the latter requires a crystal ball. I can't tell you the number of times I've heard one person say that an item had a three-year payback and another person say the same item had a thirty-year payback because of what they assumed about current vs. future price. There may be good reason to use one assumption for some things and a different one for another. What's important is that people state the assumption behind a cost when they use it.
- 7. Huge drivers in cost-effectiveness outcomes are the forecast price of energy and discount rates. The Council needs a formal policy on what data sources it will use to determine these in its analysis.

Thank you for the opportunity to share my thoughts. I look forward to participating in future conversations on this topic.

Sincerely, David Cohan

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